# **WARREN COUNTY**

# **COMMUNITY DIAGNOSIS DOCUMENT**

# A GUIDE TO HEALTHY COMMUNITIES

1997-1999

Compiled by

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# Introduction

### Mission Statement

The overall mission of the council is to assist the Department of Health by advising the Department regarding the health problems of Warren County and thus assist the Department in its responsibility to undertake "Community Diagnosis". The role of the Department of Health is to support the Council by providing the resources needed by the Council to undertake the work, and by facilitating the "Community Diagnosis" process. The following is a proposed objective statement. The mission of the Council is to assist the Department of Health by:

- 1. Developing a community health assessment which includes health problems and needs identification.
- 2. Developing goals, objectives, and plans of action to meet these needs along with identifying and securing resources to address these needs.
- 3. Establishing priorities for all major identified health problems and develop/implement strategies for appropriate interventions.
- 4. Drafting and presenting to the Department of Health the community health assessment.
- 5. Promoting and supporting the importance of reducing the health problems to the Department and the community.
- 6. Maintaining good communications with the Department via periodic reports from the Council through the Regional Health Council Representative and Community Development Staff.

## Community Diagnosis

A simple definition used by the North Carolina Center for Health and Environmental Statistics of community diagnosis is "a means of examining aggregate health and social statistics, liberally spiced with knowledge of the local situation, in order to determine the health needs of the community." By using this definition, we acknowledge that significant input from residents of the local area is essential to performing community diagnosis effectively. Although a great deal of qualified health data can be obtained from the State, the process will only be successful if local citizens are fully involved and are comfortable with the eventual findings. This is why the formation and effective utilization of county health councils are vital in achieving accurate results.

The final outcome of community diagnosis and its products should:

• Provide justification for budget improvement requests submitted to the State Legislature;

- Provide to state-level programs and their regional office personnel information that fosters better planning, promotion, and coordination of prevention and intervention strategies at the local level;
- Serve health planning and advocacy needs at the community level. Here, the community leaders and local health departments provide the leadership to ensure that documented community health problems are addressed.

The end result of the process will be a set of prioritized health goals and proposed interventions to address the needs of the community. The Tennessee Department of Health is committed to assisting communities throughout our state in finding the answers to these questions via the Community Diagnosis process. This document will explain the community diagnosis process and outcomes for Warren County. We will also provide a historical perspective with details of the council and its formation.

# History

"Public health is what we, as a society, do collectively to assure the conditions in which people can be healthy."

The Future of Public Health Institute of Medicine, 1988

This manual is designed to assist local communities, local and regional health departments, and the state department of health in fulfilling the mission of public health, as defined above. If we, as a society, are to improve the conditions that affect the health of all of us, we must begin in local communities, dealing with local conditions. Health care is a very localized phenomenon. The needs and problems of one community may be very different from other communities, even those in close geographical proximity. Community leaders together with local health departments have a responsibility to play key roles in this effort. They should lead their communities in an examination of local health problems and in the development of plans to overcome those problems.

This mission can be accomplished by implementing the three core functions of public health at all levels of government. They are:

**Assessment:** The assessment function involves the monitoring and surveillance of local problems, the assessment of needs, and the identification of resources for dealing with them.

**Policy Development:** Policy development goes hand in hand with leadership, which fosters local involvement and a sense of ownership of these policies. It should emphasize local needs and should advocate an equitable distribution of public resources and complementary private activities commensurate with community needs.

Assurance: Assurance means that high quality services, including personal health services, which are needed for the protection of the community are available and accessible to all persons. Each community should receive proper consideration in the allocation of federal, state, and local funds for health. Each community should be informed about how to obtain public health services and/or comply with health requirements.

In summary, community-based health planning is a process, which assists local citizens in their respective communities to do the following:

- Identifying the community's health care needs.
- Examine the social, economic, and political realities affecting the local delivery of health care.
- Determine what the community can realistically achieve in a health care system to meet their needs.
- Develop and mobilize an action plan based on analysis for the community.

The end result of the process should answer three questions for the community:

Where is the community now? Where does the community want to be? How will it get there?

The Tennessee Department of Health is committed to assisting communities throughout our state in finding the answers to these questions via the Community Diagnosis process. The following is the Warren County Community Diagnosis Document, which details the process the Warren County community utilized to assess its strength, weaknesses, and gaps in resources. A very thorough analysis of health statistical data, community surveys, resources, and key leaders perceptions of Warren County's health care status facing the community is presented in document form to be utilized as a baseline document for public relations, grant applications, and as a foundation of the work plan for the future.

### Summary

The Warren County Health Council was first formed in May 1997 by the Tennessee Department of Health Community Development Staff with an initial group of community leaders which consisted of the County Executive, the local mayor, School Superintendent, U.T. Agriculture Extension agency, and the local County Health Department Director. The first initial meeting took place in May 1997 with approximately 16 community leaders. Eva Lois Moran was elected chair and has remained extremely active in the Community Diagnosis process. She exemplifies the meaning of leadership within a community and constantly seeks to empower the Warren County Health Council with her enthusiasm and support. Currently the council has grown to over 41 community leaders who remain actively involved with the issues surrounding Warren County. The council consists of various community leaders such as the town mayor, county executive, school superintendent, industry representation, health

care providers, mental health care providers, local law enforcement, various community agencies and other concerned leaders as determined by council members. (Appendix 1) The Department of Health Community Development staff facilitates the Community Diagnosis process. The Community Diagnosis process seeks to identify community health care problems by analyzing health statistical data, community surveys, and council perceptions. The initial step in the process is to select a county health council. The basic steps of the Community Diagnosis process are as follows:

- Assemble the initiating group
- Select the County Health Council
- Present data to the council
- Discuss and define health problems
- Analyze the Behavioral Risk Factor Survey
- Distribute and analyze the Community Health Assessment Survey
- Score/Rank health problems
- Design interventions
- Develop funding strategies
- Assess development and effectiveness of intervention

During the course of the Community Diagnosis process, the Warren County Health Council established by-laws (Appendix 2) that reflect the mission and goals of the council illustrating their commitment to their community. The council typically meets on the second Wednesday of each month from 12:00 to 1:00pm, and the meetings are open to the public.

# County Description

# Geographic

- Warren County is located in the Upper Cumberland Region of middle Tennessee.
- Warren County is surrounded by Cannon, White, Coffee, DeKalb, Van Buren, and Grundy counties of Tennessee.
- This county is located 75 miles from Nashville, 69 miles from Chattanooga, and 126 miles from Knoxville.
- The average high temperature is 77.6 degrees and the average low is 40.1 degrees with average precipitation being 58.79 inches.
- The nearest interstate is I-24 which is approximately 23 miles from McMinnville.

### Land Area

- The county of Warren consists of 431 square miles with population density being 76.2 per square mile.
- Warren County is surrounded by an excellent rural road system.
- Warren County is known as "Nursery Capital of the World", the area is recognized for nursery stock grown in fields and valleys that spread across the countryside.
- The county is located on the Highland Rim of the Cumberland Mountains, midway between Nashville and Chattanooga.

### **Economic Base**

- The county's median family personal income is \$25,900.
- The county's median household personal income is\$21,019.
- Warren County's per capita personal income is \$10,473.
- The average weekly income for 1998 wages was \$646.
- The 1999 average labor –force total is 19,570, of those, 18,510 are employed and 1,060 are unemployed giving Warren an unemployment rate of 5.4 percent.
- The major employers of Warren County are Carrier, Bridgestone, Magnetec/Century Electric, Oster Specialty Products, Calsonic Yorozu, and Aquatech.
- Warren County is home to over 50 manufacturing plants employing 49% of the area's labor force.

# **Demographics**

- Warren County's public education system consists of 7 elementary schools, 1 middle school, 1 high school, and 1 college.
- The 1998 population estimate for Warren County is 36,160.
- The average age for a resident residing in Warren County is 35.0 years.
- The number of TennCare enrollees in Warren County is 5,839.
- Over 150 churches are located in Warren County.

# **Medical Community**

- There is one hospital facility with 118 licensed beds located in Warren County.
- The county hospital is the most used by Warren County residents; second is Davidson County and third is Rutherford County.
- The county has two nursing home facilities with a total of 304 licensed beds.
- There are 40 medical doctors and 10 dentist practicing in Warren County.

References: Tennessee Department of Health, Upper Cumberland Development District

# Community Needs Assessment

# Primary Data

### Warren County Community Health Assessment Survey

The Community Health Assessment Survey provides a profile of perceived health care needs and problems facing the community. Its purpose is to obtain subjective data from a cross section of the health care services, problems and needs in the county. The survey includes questions about the health and social problems affecting the community as well as the availability, adequacy, accessibility and level of satisfaction of health care service in the community. The community survey is not a scientific random sample of the community, however it does represent a cross section of the community, i. e. young families, single parents, the elderly, farmers, business leaders, rural residents, etc. The community development staff distributed the Community Health Assessment Survey to the health council members, who then circulated the surveys throughout the community. Results of the survey were tabulated and analyzed using the "Epi Info" computer software. The community development staff presented the final results and analysis of the survey to the county health council. The following list identifies the perceived problems facing the Warren County community based on the survey results.

| Teen Alcohol/Drug Abuse     | <b>78%</b> | <b>Top Ten Issues</b> |
|-----------------------------|------------|-----------------------|
| Teen Pregnancy              | <b>74%</b> | Highlighted           |
| Smoking                     | <b>74%</b> |                       |
| Adult Drug Abuse            | <b>70%</b> |                       |
| Adult Alcohol Abuse         | 67%        |                       |
| Stress                      | 58%        |                       |
| Smokeless Tobacco           | 58%        |                       |
| High Blood Pressure         | 56%        |                       |
| <b>Domestic Violence</b>    | 55%        |                       |
| Heart Conditions            | 53%        |                       |
| <b>Motor Vehicle Deaths</b> | 49%        |                       |
| School Dropout              | 48%        |                       |
| Arthritis                   | 47%        |                       |
| Depression                  | 47%        |                       |
| Diabetes                    | 46%        |                       |
| STD'S                       | 45%        |                       |
| Crime                       | 45%        |                       |
| Obesity                     | 44%        |                       |
| Child Abuse/Neglect         | 39%        |                       |
| Lung Cancer                 | 38%        |                       |
| Other Cancer                | 37%        |                       |

| Eating Disorders               | 36% |
|--------------------------------|-----|
| Lack of Sex Education          | 36% |
| Breast Cancer                  | 34% |
| Poverty                        | 32% |
| Unemployment                   | 32% |
| Poor Nutrition for Elderly     | 31% |
| Asthma                         | 30% |
| HIV/AIDS                       | 29% |
| Youth Violence                 | 27% |
| Poor Nutrition for Children    | 27% |
| Colon Cancer                   | 24% |
| Prostate Cancer                | 23% |
| Other Accidentals Deaths       | 23% |
| Water Pollution                | 22% |
| School Safety                  | 20% |
| Influenza                      | 18% |
| Homicide                       | 16% |
| Teen Suicide                   | 15% |
| Pneumonia                      | 15% |
| Air Pollution                  | 14% |
| On the Job Safety              | 14% |
| Adult Suicide                  | 12% |
| Hepatitis                      | 11% |
| Tuberculosis                   | 10% |
| Lack of Childhood Vaccinations | 10% |
| Toxic Waste                    | 7%  |
| Gangs                          | 6%  |
| Homelessness                   | 5%  |

### Warren County Availability of Services

| "Adequate"                     |     | "Not Adequate"                 |     |
|--------------------------------|-----|--------------------------------|-----|
| (50% or greater)               |     | (25% or greater)               |     |
| 1) Pharmacy Services           | 93% | 1) Emergency Room Care         | 48% |
| 2) Eye Care                    | 89% | 2) Alcohol/Drug Treatment      | 39% |
| 3) Dental Care                 | 80% | 2) Specialized Doctors         | 39% |
| 4) Local Family Doctors        | 73% | 3) Hospital Care               | 37% |
| 5) Home Health Care            | 71% | 3) Recreational Activities     | 37% |
| 6) Ambulance/Emergency         | 70% | 4) Child Abuse/Neglect Service | 35% |
| Services                       |     |                                |     |
| 7) Child Day Care              | 66% | 5) Mental Health Service       | 32% |
| 8) County Health Dept.         | 65% | 6) Nursing Home Care           | 29% |
| Services                       |     |                                |     |
| 9) Pregnancy Care              | 64% | 6) School Health Services      | 29% |
| 10) Health Insurance           | 58% | 6) Day Care for Home Bound     | 29% |
|                                |     | Patients                       |     |
| 11) Nursing Home Care          | 54% | 6) Pediatric Care              | 29% |
| 12) Hospital Care              | 53% | 7) Women's Health Services     | 28% |
| 13) Transportation for Medical | 52% | 8) Adult Day Care              | 27% |
| Care                           |     | •                              |     |
| 13) Medical Suppliers          | 52% | 8) Health Insurance            | 27% |
| 13) Meals on Wheels            | 52% | 9) Health Education /Wellness  | 25% |
|                                |     | Services                       |     |

### **Personal Information**

- The majority of the people completing the survey were from McMinnville and 73% have lived in the county for more than ten years.
- The average age for the community participants was 30-39 years of age with 52% being married and 40% single.
- The participant response noted that 98% had health insurance, 13% were TennCare enrollees, and 7% receive either SSI or AFDC.

A total of 161 individuals responded to the survey. The findings of the survey revealed that teen alcohol and drug abuse, teen pregnancy, and smoking were perceived as top community concerns. The council also had some discussion regarding motor vehicle deaths in their community. These same issues are seen as top problems/concerns across the region based on survey analysis.

### Behavioral Risk Factor Survey

The Behavioral Risk Factor Survey (BRFS) is a random telephone survey, coordinated through the Centers for Disease Control, which collects information from adults on health behaviors and knowledge related to leading causes of death in each of the states. About half of all deaths occurring annually are now attributed to modifiable behavioral risks. In addition to determining what types of health risks are most prevalent in the population, the BRFS data will be very useful in determining what types of interventions are most needed for other health problems such as excess deaths from a particular chronic disease. A modified version of the standard BRFS was developed specifically for the "Community Diagnosis" process. In addition to the questions on the standard BRFS survey, a series of health issues are listed. The respondent is asked if the issue is a "Definite Problem", "Somewhat of a Problem", "Not a Problem", or "Not Sure". The list of the health issues with frequency of response as a "Definite Problem" is as follows:

| Tobacco Use                  | 56% |                                   |
|------------------------------|-----|-----------------------------------|
| Drug Abuse                   | 49% | <b>Top Ten Issues Highlighted</b> |
| <b>Teen Pregnancy</b>        | 47% | •                                 |
| Cancer                       | 44% |                                   |
| Alcohol Abuse                | 38% |                                   |
| Arthritis                    | 34% |                                   |
| High Blood Pressure          | 33% |                                   |
| Obesity                      | 32% |                                   |
| <b>Heart Conditions</b>      | 31% |                                   |
| Health Problems of the Lungs | 24% |                                   |
| Diabetes                     | 18% |                                   |
| STD'S                        | 16% |                                   |
| Environmental Issues         | 15% |                                   |
| Mental Health Problems       | 11% |                                   |
| Violence in the Home         | 10% |                                   |
| Animal Control               | 6%  |                                   |
| Suicide                      | 5%  |                                   |
| Other Violence               | 4%  |                                   |

### Warren County's Access to Care Issues Percent Saying Definite Problem

| Access to Hospitals                | 8% |
|------------------------------------|----|
| Transportation to Health Care      | 7% |
| Access to Physicians or Doctors    | 5% |
| Access to Assisted Living Services | 5% |
| Access to Birth Control Methods    | 2% |
| Access to Prenatal Care            | 2% |

| Access to Dental Care             | 2% |
|-----------------------------------|----|
| Access to Nursing Home Care       | 2% |
| Access to Pharmacies or Medicines | 1% |

### Other Issues to Consider

#### **Tobacco Use**

Percent of respondents reporting smoking at least 100 cigarettes in their life:

Yes: 54% No: 46%

Percent of respondents that report current cigarette use:

Daily Use: 49% Some Use: 5% Not At All: 47%

### **Questions Regarding Mammograms**

Percent of women reporting having a mammogram:

Yes: 66% No: 34%

Reasons reported for not having a mammogram:

Doctor not recommended: 19%
Not needed: 8%
Cost too much: 8%
Too young: 39%
No reason: 25%

When was last mammogram performed:

In last year: 65% 1-2 years: 15% > Than 2 years: 20% The Behavioral Risk Factor Survey is a random telephone survey conducted by the University of Tennessee. They survey took approximately 20 minutes to complete. There were approximately 200 interviews conducted from the Warren County community. The findings of the survey revealed that the residents of Warren County perceive tobacco use, drug abuse, teen pregnancy and cancer as top health problems facing their community.

There were very few concerns of Warren County residents regarding the "Access to Care" issues. The perceptions were that they do not have any real problems with regards to the availability of health care services. Their greatest concern appeared to be transportation to health care services, but less that 10% of the respondents indicated that it was a "definite problem".

# Secondary Data

### Summary of Data Use

Health Indicator Trends Warren County, Tennessee Using 3-Year Moving Averages

### Pregnancy and Birth Data

Data is based on information from the Office of Vital Records, Tennessee Department of Health. All health indicator trends are formatted into three-year moving averages to reflect a trend over the past ten years.

| HEALTH INDICATOR  | COUNTY<br>TREND | COUNTY<br>COMPARED<br>TO REGION | COUNTY<br>COMPARED<br>TO STATE |
|---|-----------------|---------------------------------|--------------------------------|
| 1. Number births/1,000 females                                | Increasing      | Above                           | Above                          |
| 2. Percent births to unwed women                              | Increasing      | Above                           | Below                          |
| 3. Number teenage pregnancies                                 | Decreasing      | Above                           | Below                          |
| 4. Number pregnancies/1,000 females                           | Stable          | Above                           | Below                          |
| Number of pregnancies/1000<br>females ages 10-14              | Unstable        | Above                           | Below                          |
| Number of pregnancies/1000<br>females ages 15-17              | Decreasing      | Above                           | Below                          |
| Number of pregnancies/1000<br>females ages 18-19              | Decreasing      | Below                           | Below                          |
| 8. Percent pregnancies to unwed women                         | Increasing      | Above                           | Below                          |
| Percent of live births classified as low birthweight          | Unstable        | Above                           | Below                          |
| 10. Percent of live births classified as very low birthweight | Unstable        | Above                           | Below                          |
| Percent births w/1 or more high risk characteristics          | Increasing      | Above                           | Above                          |

| 12. Infant deaths/1,000 births   | Stable | Below | Below |
|----------------------------------|--------|-------|-------|
| 13. Neonatal deaths/1,000 births | Stable | Below | Below |

In analyzing the pregnancy and birth trends, the council focused on the following trends that showed an increasing indicator:

- Number of births/1000 females
- Percent of births to unwed women
- Percent of pregnancies to unwed women
- Percent births w/1 or more high risk characteristics

# Mortality Data

Using information reported by physicians on death certificates, underlying cause of death is coded by staff in Vital Records. The staff uses National Center for Health Statistics rules for assigning codes for underlying cause of death.

| 14. White male age-adjusted mortality rate/100,000 population         | Decreasing | Below | Below |
|---|------------|-------|-------|
| 15. Other races male age-adjusted mortality rate/100,000 population   | Unstable   | Above | Below |
| 16. White female age-adjusted mortality rate/100,000 population       | Unstable   | Below | Below |
| 17. Other races female age adjusted mortality rate/100,000 population | Unstable   | Above | Below |
| 18. Female breast cancer mortality rate 100,000 women age 40 or more  | Decreasing | Below | Below |
| 19. Nonmotor vehicle accidental mortality rate                        | Unstable   | Below | Below |
| 20. Motor vehicle accidental mortality rate                           | Unstable   | Below | Above |
| 21. Violent death rates/100,000 population                            | Unstable   | Below | Below |

# Morbidity Data

Based on the number of incidence (new cases) which occur for a given disease in a specified time frame and the number of prevalence (existing cases) for a disease in a specified time period.

| 22. Vaccine preventable disease rate/100,000 population | Stable     | Above | Below |
|---|------------|-------|-------|
| 23. Tuberculosis disease rate/100,000 population        | Decreasing | Below | Below |
| 24. Chlamydia rate/100,000 population                   | Increasing | Above | Below |
| 25. Syphilis rate/100,000 population                    | Stable     | Above | Below |
| Gonorrhea rate/100,000 population                       | Stable     | Above | Below |

### Healthy People 2000

In 1991, the Public Health Service of the U.S. Department of Health and Human Services published Healthy People 2000: National Health Promotion and Disease Prevention Objectives. That report was intended to assist both health providers and consumers in addressing measurable targets to be achieved by the year 2000. The data contained in this report addresses health status indicators for births, deaths, selected diseases, and external influences. The following is a comparison of the objectives to Warren County. The data used for Warren County is based on 1994-96 three year moving averages.

#### Healthy People 2000 Compared to Warren County

| Health Status Indicators                   | Warren County<br>Rate | Tennessee Rate | Nation's<br>Rate |
|--|-----------------------|----------------|------------------|
| Death from all causes                      | 545.9                 | 563.1          | No<br>Objective  |
| Coronary Heart Disease                     | 130.0                 | 134.8          | 100              |
| Deaths from Stroke                         | 32.3                  | 34             | 20               |
| Deaths of Females from Breast Cancer       | 9.3                   | 22.4           | 20.6             |
| Deaths from Lung Cancer                    | 43.9                  | 47.5           | 42               |
| <b>Deaths from Motor Vehicle Accidents</b> | 39.5                  | 23.6           | 16.8             |
| Deaths from Homicide                       | 3.8                   | 12.1           | 7.2              |
| Deaths from Suicide                        | 14.8                  | 12.6           | 10.5             |
| Infant Deaths                              | 2.1                   | 9.6            | 7.0              |
| Percent of Births to Adolescent Mothers    | 7.1                   | 6.6            | none             |
| Low Birthweight                            | 7.9                   | 8.7            | 5.0              |
| Late Prenatal Care                         | 17.2                  | 19.9           | 10.0             |
| Incidence of AIDS                          | 6.6                   | 14.1           |                  |
| Incidence of Tuberculosis                  | 5.7                   | 11.6           | 3.5              |

The indicators that are in bold are Warren County's rates that are above the state's objectives according to Tennessee's Healthy People 2000.

#### List of Data Sources

TN Department of Health Office of Vital Records

TN Department of Health Picture of the present, 1997

TN Department of Health, Health Access

TN Department of Economic and Community Development

Upper Cumberland Development District

Healthy People 2000

# Health Issues and Priorities

## **Community Process**

In summary, the Health Indicator Trends that have shown an increasing trend over the past 10 years include:

- Number of births per 1,000 females
- Percent births to unwed women
- Percent pregnancies to unwed women
- Percent births with one or more high risk characteristic
- Chlamydia rate per 100,000 population

After a thorough analysis of all data sets, the Behavioral Risk Factor Survey, and the Community Health Assessment Survey, the council established priorities among a multitude of problems. In order to ensure the accuracy of the council's ranking, the Community Development staff developed a prioritization table that provided a means of comparison between all top issues addressed. This table presents the order ranking of each issue from both surveys and then compares the actual data to each issue. The data may either reinforce or refute the council's perceptions about their top concerns. The Prioritization Table is a culmination of the information presented to the council over the last several months and is provided in a concise and well-organized manner.

# **Warren County Prioritization Table**

| Top Issues           | BRFS                   | Comm.<br>Quest.                | Health Indicator Trends<br>(Secondary Data)   |
|----------------------|------------------------|--------------------------------|---|
| Teen Alcohol Abuse/  | 5                      | 1                              | Refer to Health Status of Tennesseans   |
| Teen Drug Abuse      | 2                      |                                | UC ranked 4 <sup>th</sup> in State in alcohol-related   |
| -                    | (Addressed total pop.) |                                | crashes.  |
| Teen Pregnancy       | 3                      | 2                              | Teen Pregnancy rates have shown a steady decline from 1991-93 through 1994-96 and are still above the region and below the state. The 1994-96 rate is 19.0 compared to the state rate of 21.0.  |
| Smoking              | 1                      | 2                              | Bronchitis disease mortality rate drastically increased in ages 45-64 and ages 65+ from over the past 10 years.   |
| Adult Drug Abuse     | 2                      | 3<br>(Addressed<br>total pop.) | Chronic Liver Disease and cirrhosis as a leading cause of death in ages 45-64 has remained stable with a slight decrease in   |
| Adult Alcohol Abuse  | 5                      | 4                              | rates over the past 10 years.   |
| High Blood Pressure  | 7                      | 6                              | Cerebrovascular Disease Mortality rates   |
|                      |                        | Stress                         | in ages 45-64 show an unstable trend  |
|                      |                        | ranked                         | over the past 10 years with an increase   |
|                      |                        | 5 <sup>th</sup>                | in rates since 1990-92.   |
|                      |                        |                                | In ages 65+ the rates have remained   |
|                      |                        |                                | fairly stable with a slight decrease since 1988-90.   |
| Domestic Violence    | 15                     | 6                              |   |
| Smokeless Tobacco    |                        | 6                              |   |
| Motor Vehicle Deaths |                        | 7                              | Motor Vehicle Accidental Mortality rate   |
|                      |                        |                                | has shown an increase since 1991-93   |
|                      |                        |                                | and is above the state and the region   |
|                      |                        |                                | through 1996.   |
| Heart Conditions     | 9                      | 8                              | In ages 25-44, Heart Disease Mortality Rates increased drastically from 1988-90 through 1992-94. In ages 45-64, rates declined from 1988-90 through 1992-94. In 1996 alone, there were 134 deaths from Heart Disease with a rate above the state. |

| Depression                   |    | 8  | The total number of adolescent violent deaths (15-19), 1994-96, is 9. The Warren rate ranks 6 <sup>th</sup> in comparison to the region and is above the state's rate.                         |
|------------------------------|----|----|--|
| School Drop-Out              |    | 8  | In 1993-95, high school drop-out rate ranked highest in the region. In 1994-96, the rates ranked 6 <sup>th</sup> in the region and is above the state with an average of 65 dropouts per year. |
| Obesity                      | 8  | 10 |  |
| Cancer                       | 4  |    | According to a 10-year trend, malignant  |
| Lung Cancer                  |    | 14 | neoplasm mortality rates are increasing  |
| Other Cancer                 |    | 15 | in ages 25-44, and have remained stable  |
| Breast Cancer                |    | 17 | in ages 45+. For 1995, total cancer  |
|                              |    |    | incidence rates are below the state's rate and in 1996, malignant neoplasm   |
|                              |    |    | mortality rate was below the states rate.  |
|                              |    |    | Lung Cancer incidence rates for 1995   |
|                              |    |    | are below the state's rate. Female   |
|                              |    |    | Breast Cancer Mortality rate shows a   |
|                              |    |    | decreasing trend over the past 10 years  |
|                              |    |    | with rates below the region and the  |
|                              |    |    | state.   |
| Health Problems of the Lungs | 10 |    |  |

### Warren County Priorities

In order to ensure that this process was impartial and unbiased, the Warren County Health Council went through a method of objectively scoring and ranking their top issues. Each individual council member ranked every community issue according to the size and the seriousness of the problem. The scores from all council members were then counted. The aggregate score represented the rank order for each priority issue. After a great deal of discussion, it was the consensus of the Health Council to target tobacco use/smoking/smokeless tobacco.

#### The Warren County Health Council identified the following issues as priorities:

- 1. Tobacco Use/Smoking/Smokeless Tobacco
- 2. Adult Alcohol and Drug Abuse
- 3. Teen Alcohol and Drug Abuse
- 4. Teen Pregnancy
- 5. High Blood Pressure
- 6. Heart Conditions
- 7. Depression
- 8. Motor Vehicle Deaths
- 9. Domestic Violence

# Future Planning

Through the Community Diagnosis process, it was determined that the top issue of concern was tobacco use/smoking/smokeless tobacco for Warren County. The future plans of the Warren County Health Council are to go through the Action Steps. This process is detailed in the following outline.

#### **Taking Action Outline**

The *Taking Action* cycle is a systematic approach to problem solving. There are five phases of the cycle:

| A            | Phase 1 | <u>A</u> ssess the Situation |
|--------------|---------|------------------------------|
| $\mathbf{C}$ | Phase 2 | Determine <u>Causes</u>      |
| $\mathbf{T}$ | Phase 3 | <u>Target Solutions</u>      |
| I            | Phase 4 | Design Implementation        |
| ON           | Phase 5 | Make it <i>On</i> going      |

#### Phase 1 <u>A</u>ssess the Situation

- Identifying priority health issue.
- Answering the question, "How does the priority health issue affect your community?"
- Writing mission statement based on answers to questions.
- Making decision to pursue health-related concern or to select another ingredient to work on.
- Listing community resources that could be applied to the priority health issue.
- Developing answers to the following questions:

**Who** are the people/group being targeted?

What do they need?

Where do they need it?

**When** is it needed?

• Identifying additional data and ways to gather information.

#### Phase 2 Determine Causes

- Reviewing who, what, where, and when for current health concerns and introduction to the "why".
- Discussing possible causes and the difference between a cause and a symptom.
- Listing causes of the problem, grouping them, and identifying the ones that are creating the problem issue.
- Identifying additional data that may be needed from the target group.

### Phase 3 <u>Target Solutions and Ideas</u>

- Targeting a solution.
- Identifying potential solutions which offer the greatest benefit for the causes.
- Listing possible barriers to the solution and actions to correct them.
- Developing criteria for a good solution.
- Revising the health-related concern into a problem statement which includes: the health-related concern, the target population, the cause(s), and the solution or plan of action.

### **Phase 4** Design <u>Implementation</u>, the Action Plan

- Setting goals and objectives.
- Forming work groups for the following categories: community partners, equipment needs, time lines, marketing plan, and staff needs/training.
- Presenting group/committee reports.
- Finalizing content of the categories.
- Restating goals and objectives.
- Forming budget group.

Budget revisions and final approval of Action Plan.

### Phase 5 Make it Ongoing.

• Forming committees for:

Evaluation

Development/Sustainability

Strategies for short and long term funding options.

# Appendices

# Appendix 1

# Council Makeup

# Warren County Health Council

| Glyna Lee                                  | Madge Hutchins: Nursing Supervisor     |
|--|--|
| City Bank and Trust                        | Warren County Health Department        |
| 101 East Main                              | 1                                      |
| McMinnville, TN 37110                      |  |
| Shirley Measles: Director                  | Mary Jane Paz: School Nurse            |
| Warren County Health Department            | Director of Health Services            |
|  | Hickory Creek School                   |
|  | 270 Pioneer Lane                       |
|  | McMinnville, TN 37110                  |
| Sally Heath                                | Edith Webb                             |
| Health Coordinator                         | County Executive Office                |
| Hickory Creek School                       | P.O. Box 639                           |
| 270 Pioneer Lane                           | McMinnville, TN37110                   |
| McMinnville, TN37110                       |  |
| Margaret Fullam                            | Amy Satterwhite                        |
| Mcminnville Housing Authority              | Standard Publishing                    |
| 115 Hamilton Street                        | 105 College St.                        |
| McMinnville, TN 37110                      | McMinnville, TN 37110                  |
| Mr. Wayne Wolford: Regional Health Council | Glennis Bassi                          |
| P.O. Box 7319                              | Warren County Teachers Center          |
| McMinnville, TN 37110                      | 200 Caldwell Street, Suite B-100       |
|  | McMinnville,TN 37110                   |
| Kay Ramsey                                 | Dr. Kerri McGibboney                   |
| Department of Human Services               | CHEER Mental Health Center             |
| 1200 Belmont Drive                         | 120 Omni Drive                         |
| McMinnville, TN 37110                      | McMinnville, TN 37110                  |
| Eva Lois Moran: Occupational Health        | Dr. Jerry Hale                         |
| Columbia River Park Hospital               | Superintendent of Instruction          |
| 1559 Sparta Road                           | 109 Lyons Street                       |
| McMinnville, TN 37110                      | McMinnville, TN 37110                  |
|  |  |
|  |  |
| Donald Jones                               | Ms. Sharon Barnes: Hospital/ Marketing |
| Drug Free Schools Coordinator              | 1559 Sparta Street                     |
| 109 Lyons Street                           | McMinnville, TN 37110                  |
| McMinnville, TN 37110                      |  |
| Mr. Wayne Pryor: RHI Board                 | Kim Rigsby                             |
| 21 Pryor Lane                              | Columbia River Park Hospital           |
| McMinnville, TN 37110                      | 1559 Sparta Road                       |
|  | McMinnville, TN 37110                  |
| Ms. Lynn Greenwell: School System          | Buffalo Valley, Inc.                   |
| 2251 Old Rock Island Road                  | P.O. Box 117                           |
| Rock Island, TN 38581                      | 501 Park Avenue South                  |
|  | Holenwald, TN 38462                    |

| Hershey Glenn: Home Health              | Kimberly Freeland                  |
|---|------------------------------------|
| 159 Omni Drive                          | Regional Health Office             |
| McMinnville, TN 37110                   |                                    |
| Carrie Hawk: Healthwise Publications    | Linda Wilson                       |
| 1206 Hillsboro Street                   | Director of Special Education      |
| Manchester, TN 37355                    | P.O. Box102                        |
|   | Viola, TN 37394                    |
| Jacob Martin, M.D.                      | Becky Hawks: TN Dept. of Health    |
| Columbia River Park Hospital            | Cordell Hull Building, forth floor |
| 1559 Sparta Road                        | 425 5 <sup>th</sup> Ave. North     |
| McMinnville, TN 37110                   | Nashville, TN 37247                |
| Patricia Stubblefield                   | Bryan Herriman                     |
| DHS                                     | CHEER MHC                          |
| 1200 Belmont Drive                      | 120 Omni Drive                     |
| McMinnville, TN 37110                   | McMinnville, TN 37110              |
| Angie Beaty                             | Leigh Moore                        |
| American Cancer Society                 | DHS                                |
| 508 State Street                        | 1200 Belmont Drive                 |
| Cookeville, TN 38501                    | McMinnville, TN 37110              |
| Iliana Machado: Translator              | Lesa Duvall: School Nurse          |
| 344 Travis Trail                        | 2071 Viola Road                    |
| Mcminnville, TN 37110                   | McMinnville, TN 37110              |
| Dawn Wanamaker: School Nurse            | Susan Burrows: Home Health         |
| 960 C. Rodt Rd.                         | 421 Sunnyside                      |
| McMinnville, TN 37110                   | McMinnville, TN 37110              |
| Cindy Barnes: Cumberland Lumber         | Glenn Barnes: School System        |
| 329 Lagoon Drive                        | 219 N. Chancery Street             |
| McMinnville, TN 37110                   | McMinnville, TN 37110              |
| Danny Wix: Law Enforcement              | Pamela Disbro: Hospital            |
| 7984 Fountain Grove Road                | 140 Vo-Tech Drive, Suite 1         |
| Morrison, TN37357                       | McMinnville, TN 37110              |
| Cheryl Watson Mingle                    | Jill Brock                         |
| Warren County Senior Citizen Center     | Health Services                    |
| 809 Morrison Street                     | 308 Pioneer Lane                   |
| McMinnville, TN 37110                   | McMinnville, TN 37110              |
| Rebecca Oldham: Developmental Disbility |                                    |
| 198 Edgefield Drive                     |                                    |
| McMinnville, TN 37110                   |                                    |

# Appendix 2

### BY LAWS FOR WARREN COUNTY HEALTH COUNCIL

#### ARTICLE I. NAME

The name of this organization shall be WARREN COUNTY HEALTH COUNCIL (hereafter referred to as "COUNCIL") and will exist within the geographic boundaries of WARREN County, Tennessee. The council shall exist as a non-incorporated, not-for-profit, voluntary membership community service organization.

#### ARTICLE II. MISSION

The Warren County Health Council is to act as an independent advisory organization whose purpose is to facilitate the availability, accessibility and affordability of quality health care within the Upper Cumberland Tennessee Public Health Region.

#### ARTICLE III. GOALS

The goals of the Council are to assess the present and future health care needs of the Warren County community and to examine the available health care, economic, political and social resources therein which may be coordinated and developed to address unmet health care needs, improve existing services, and solve specific health care problems within the community. From its analysis, the Council will: (1) formally define health care problems and needs within the community, (2) develop goals, objectives and plans of action to address these needs, and (3) formally identify all resources which are available to affect solutions.

#### ARTICLE IV. OFFICERS

Section 1: Officers

The officers of the council shall consist of the Chairperson, Vice-Chairperson, Secretary and Treasurer.

Section 2: Chairperson

The Chairperson will be elected by majority vote of the Council from nominees among its members. The Chairperson will preside over all meetings of the Council and will set the agenda for each meeting.

Section 3: Vice-Chairperson

The Vice-Chairperson will be selected by majority vote of the Council from nominees among its members. The Vice-Chairperson will preside in the absence of the Chairperson and assume duties by the Chairperson.

#### Section 4: Secretary/Treasurer

The Secretary/Treasurer will be selected by majority vote of the Council from nominees among its members. The Secretary/Treasurer will record the business conducted at meetings of the Council in the form of minutes, and will issue notice of all meetings and perform such duties as assigned by the Council. The Secretary/Treasurer shall keep account of all money arising from the Council activities. No less than annually, or upon request, the Secretary/Treasurer shall issue a financial report to the membership. The Secretary/Treasurer shall perform such duties incidental to this office.

#### Section 5: Term of Office

Officers shall be elected at the meeting in or following July of each year for a term of one year. Officers may be re-elected to serve additional terms.

#### ARTICLE V. MEMBERS

Membership in the Council shall be voluntary and selected by the Board of Directors. The Board of Directors will be composed of the current elected officers of the Council. The Council shall consist of an adequate number of voting members as to be effectively representative of all segments of the community. Leaders in the areas of health care, finance, business, industry, civic organizations, social welfare organizations, advocacy groups, and government may be invited to serve. The Council shall also invite the membership of health care consumer representatives from diverse socioeconomic backgrounds.

#### ARTICLE VI. MEETINGS

Section I: Regular Meetings

The Council will conduct regularly scheduled meetings, at intervals of no less than once every two (2) months, to be held at a time and place specified by the Council Chairperson.

Section 2: Special Meetings

The Council Chairperson may call a special meeting, as desired appropriate, upon five days written notice to the membership.

#### Section 3: Quorum

A quorum shall consist of a majority of voting members present at the Council meeting.

#### ARTICLE VII. COMMITTEES

The Council may establish such standing or special committees as deemed appropriate for the conduct of its business. Committee membership will be assigned by the Chairperson and may consist of both Council members and other concerned individuals who are not members of the Council.

#### ARTICLE VIII: APPROVAL AND AMENDMENTS

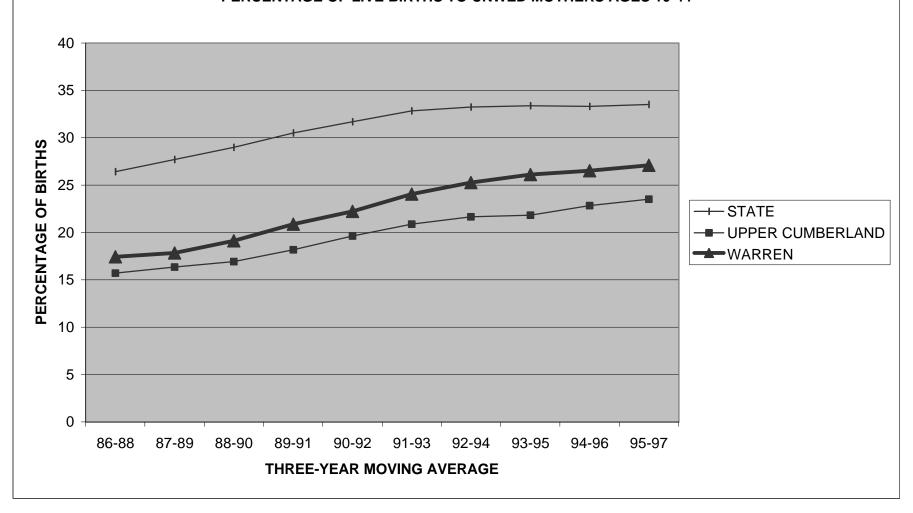
These Bylaws will become effective upon approval by a majority vote of the membership of the Council. Thereafter, these Bylaws may be amended or repealed at any regular or special meeting called for the purpose by a majority vote of the voting members present, provided that the proposed additions, deletions or changes have been submitted in writing to all Council members not less than thirty (30) days prior to the meeting at which formal action on such amendments are sought.

# Appendix 3

Pregnancy and Birth Data

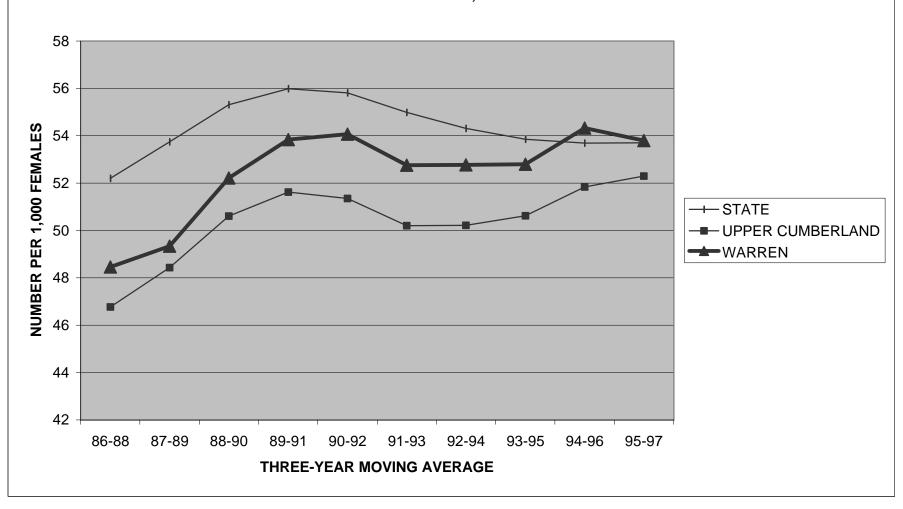
|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 26.4  | 27.7  | 29.0  | 30.5  | 31.7  | 32.8  | 33.2  | 33.4  | 33.3  | 33.5  |  |
| UPPER CUMBERLAND | 15.7  | 16.4  | 16.9  | 18.2  | 19.6  | 20.9  | 21.7  | 21.8  | 22.9  | 23.5  |  |
| WARREN           | 17.4  | 17.8  | 19.1  | 20.9  | 22.2  | 24.0  | 25.3  | 26.1  | 26.5  | 27.1  |  |

### PERCENTAGE OF LIVE BIRTHS TO UNWED MOTHERS AGES 10-44



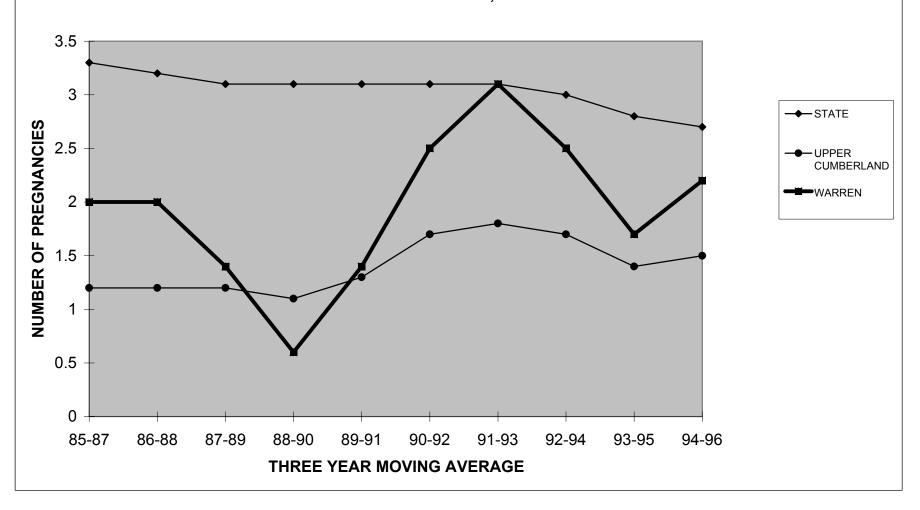
|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 52.2  | 53.7  | 55.3  | 56.0  | 55.8  | 55.0  | 54.3  | 53.9  | 53.7  | 53.7  |  |
| UPPER CUMBERLAND | 46.8  | 48.4  | 50.6  | 51.6  | 51.4  | 50.2  | 50.2  | 50.6  | 51.8  | 52.3  |  |
| WARREN           | 48.5  | 49.3  | 52.2  | 53.8  | 54.1  | 52.8  | 52.8  | 52.8  | 54.3  | 53.8  |  |

### NUMBER OF LIVE BIRTHS PER 1,000 FEMALES AGES 10-44



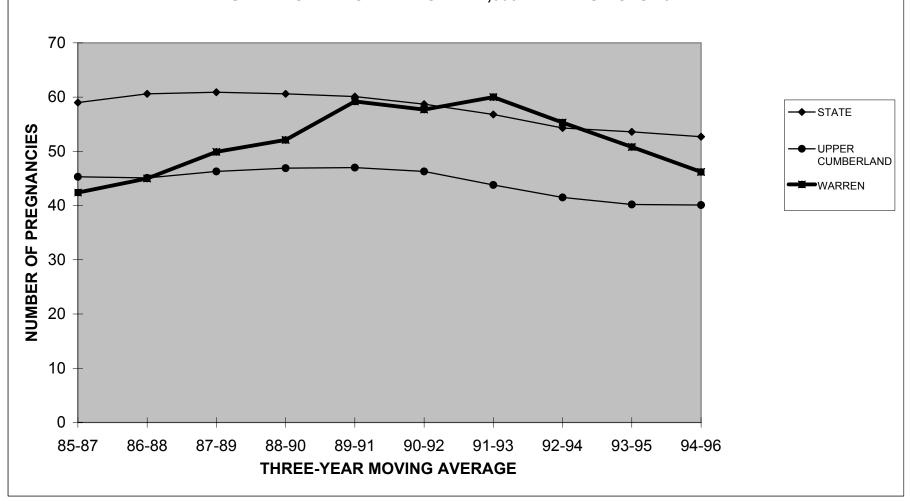
|                  | 85-87 | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 3.3   | 3.2   | 3.1   | 3.1   | 3.1   | 3.1   | 3.1   | 3     | 2.8   | 2.7   |  |
| UPPER CUMBERLAND | 1.2   | 1.2   | 1.2   | 1.1   | 1.3   | 1.7   | 1.8   | 1.7   | 1.4   | 1.5   |  |
| WARREN           | 2     | 2     | 1.4   | 0.6   | 1.4   | 2.5   | 3.1   | 2.5   | 1.7   | 2.2   |  |

### NUMBER OF PREGNANCIES PER 1,000 FEMALES AGES 10-14



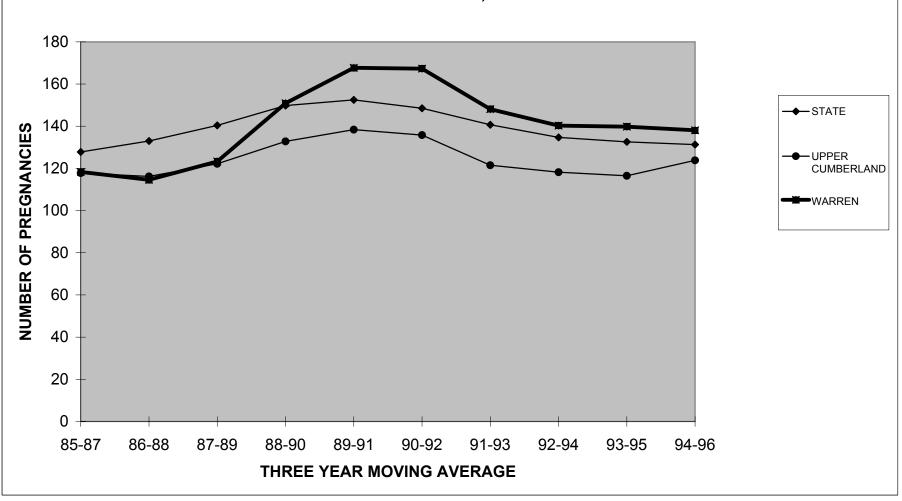
|                  | 85-87 | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 59    | 60.6  | 60.9  | 60.6  | 60.1  | 58.7  | 56.8  | 54.3  | 53.6  | 52.7  |  |
| UPPER CUMBERLAND | 45.3  | 45.1  | 46.3  | 46.9  | 47    | 46.3  | 43.8  | 41.5  | 40.2  | 40.1  |  |
| WARREN           | 42.4  | 45    | 49.9  | 52.1  | 59.2  | 57.7  | 60    | 55.3  | 50.8  | 46.2  |  |

### **NUMBER OF PREGNANCIES PER 1,000 FEMALES AGES 15-17**



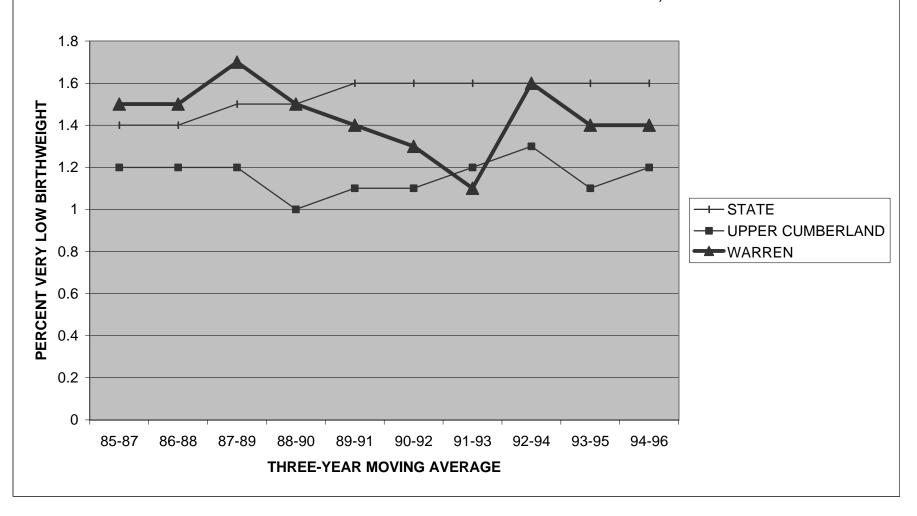
|                  | 85-87 | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 127.8 | 133   | 140.4 | 149.8 | 152.5 | 148.5 | 140.7 | 134.7 | 132.6 | 131.3 |  |
| UPPER CUMBERLAND | 117.8 | 116.2 | 122.2 | 132.8 | 138.4 | 135.8 | 121.5 | 118.2 | 116.5 | 123.8 |  |
| WARREN           | 118.3 | 114.6 | 123.3 | 150.9 | 167.7 | 167.3 | 148.1 | 140.3 | 139.8 | 138.1 |  |

# **NUMBER OF PREGNANCIES PER 1,000 FEMALES AGES 18-19**



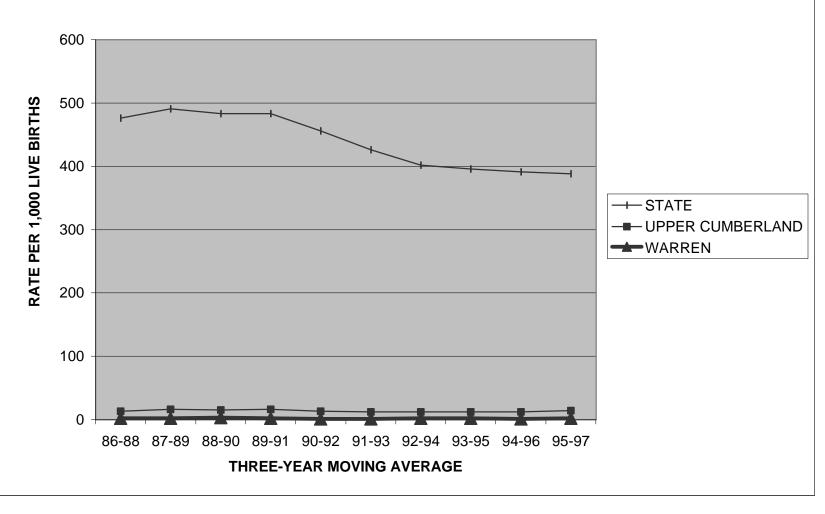
|                  | 85-87 | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 1.4   | 1.4   | 1.5   | 1.5   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   |  |
| UPPER CUMBERLAND | 1.2   | 1 7   | 1.2   | 1     | 1.1   | 1.1   | 1.2   | 1.3   | 1.1   | 1.2   |  |
| WARREN           | 1.5   | 1.5   | 1.7   | 1.5   | 1.4   | 1.3   | 1.1   | 1.6   | 1.4   | 1.4   |  |

#### PERCENT OF LIVE BIRTHS CLASSIFIED AS VERY LOW BIRTHWEIGHT, AGES 10-44



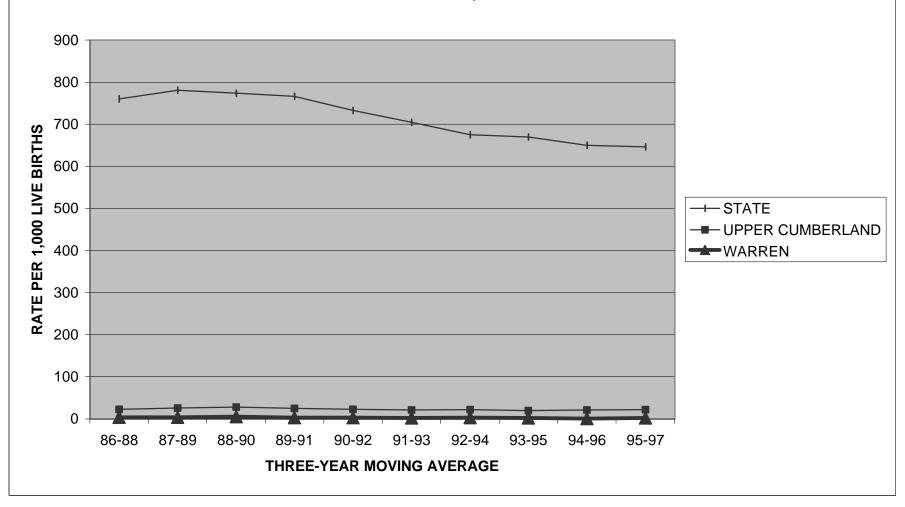
|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 476   | 491   | 483   | 483   | 456   | 426   | 402   | 396   | 391   | 388   |  |
| UPPER CUMBERLAND | 13    | 16    | 15    | 16    | 13    | 12    | 12    | 12    | 1 1/  | 14    |  |
| WARREN           | 2     | 2     | 3     | 2     | 1     | 1     | 2     | 2     | 1     | 2     |  |





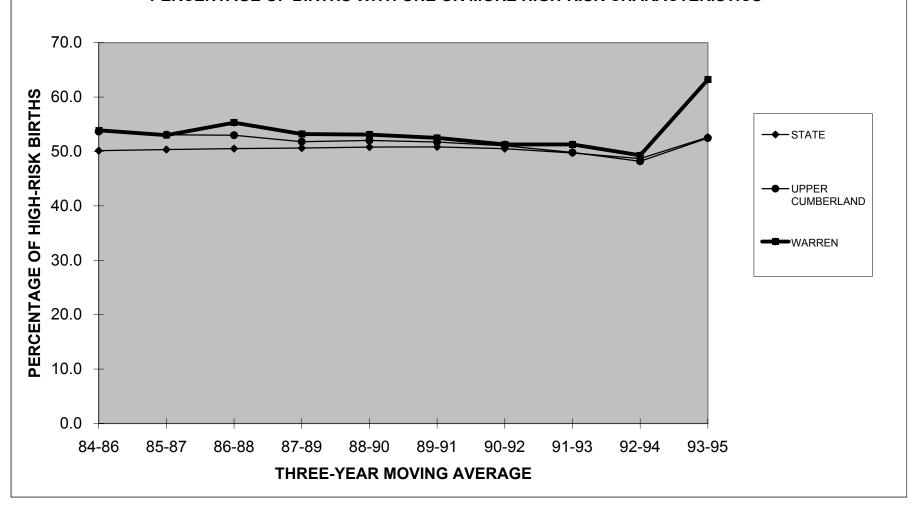
|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 760   | 781   | 774   | 766   | 733   | 705   | 675   | 670   | 650   | 646   |  |
| UPPER CUMBERLAND | 23    | 26    | 28    | 25    | 23    | 21    | 22    | 20    | 21    | 22    |  |
| WARREN           | 4     | 4     | 5     | 3     | 3     | 2     | 3     | 2     | 1     | 2     |  |





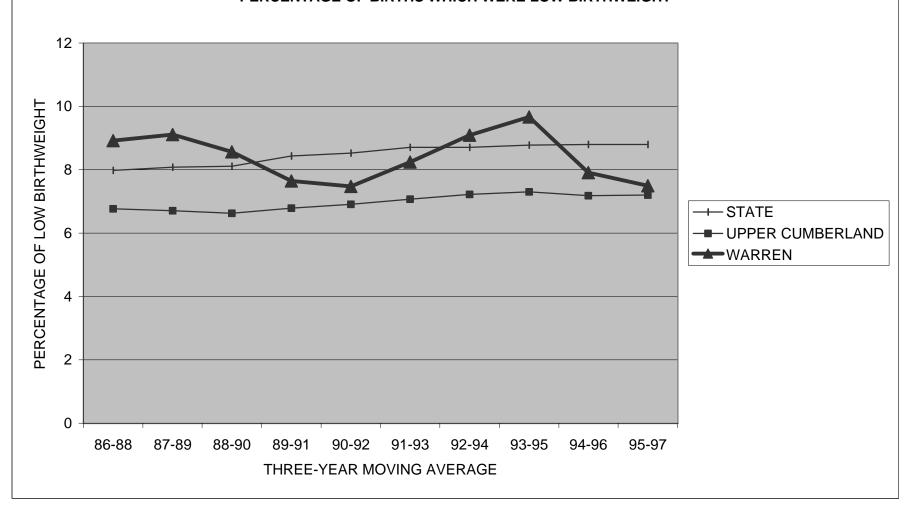
|                  | 84-86 | 85-87 | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 50.1  | 50.3  | 50.5  | 50.6  | 50.8  | 50.8  | 50.5  | 49.7  | 48.7  | 52.6  |  |
| UPPER CUMBERLAND | 53.7  | 53.1  | 53.0  | 51.8  | 52.0  | 51.7  | 51.0  | 49.8  | 48.2  | 52.5  |  |
| WARREN           | 53.9  | 53.0  | 55.3  | 53.2  | 53.1  | 52.5  | 51.3  | 51.3  | 49.3  | 63.2  |  |

#### PERCENTAGE OF BIRTHS WITH ONE OR MORE HIGH-RISK CHARACTERISTICS\*



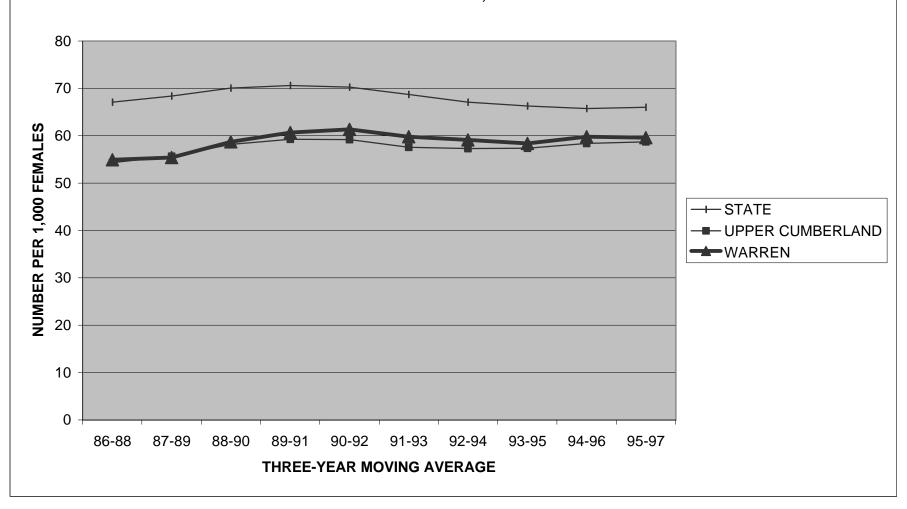
|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 8.0   | 8.1   | 8.1   | 8.4   | 8.5   | 8.7   | 8.7   | 8.8   | 8.8   | 8.8   |  |
| UPPER CUMBERLAND | 6.8   | 6.7   | 6.6   | 6.8   | 6.9   | 7.1   | 7.2   | 7.3   | 7.2   | 7.2   |  |
| WARREN           | 8.9   | 9.1   | 8.6   | 7.6   | 7.5   | 8.2   | 9.1   | 9.7   | 7.9   | 7.5   |  |

#### PERCENTAGE OF BIRTHS WHICH WERE LOW BIRTHWEIGHT



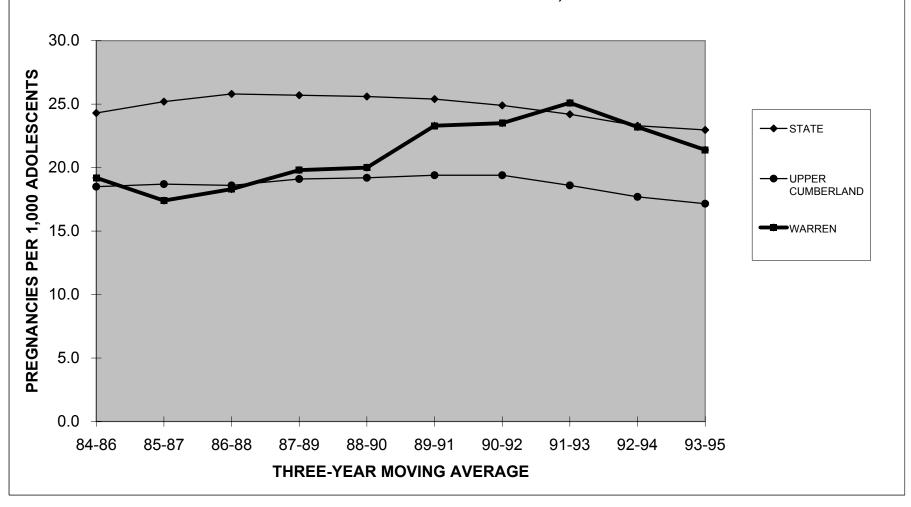
|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 67.1  | 68.4  | 70.1  | 70.6  | 70.3  | 68.7  | 67.1  | 66.3  | 65.8  | 66.0  |  |
| UPPER CUMBERLAND | 54.3  | 55.6  | 58.2  | 59.2  | 59.2  | 57.6  | 57.3  | 57.4  | 58.4  | 58.7  |  |
| WARREN           | 54.9  | 55.4  | 58.7  | 60.7  | 61.4  | 59.8  | 59.1  | 58.4  | 59.8  | 59.6  |  |

#### **NUMBER OF PREGNANCIES PER 1,000 FEMALES AGES 10-44**



|                  | 84-86 | 85-87 | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 24.3  | 25.2  | 25.8  | 25.7  | 25.6  | 25.4  | 24.9  | 24.2  | 23.3  | 23.0  |  |
| UPPER CUMBERLAND | 18.5  | 18.7  | 18.6  | 19.1  | 19.2  | 19.4  | 19.4  | 18.6  | 17.7  | 17.2  |  |
| WARREN           | 19.2  | 17.4  | 18.3  | 19.8  | 20.0  | 23.3  | 23.5  | 25.1  | 23.2  | 21.4  |  |

# **TOTAL NUMBER OF TEENAGE PREGNANCIES PER 1,000 FEMALES AGES 10-17**

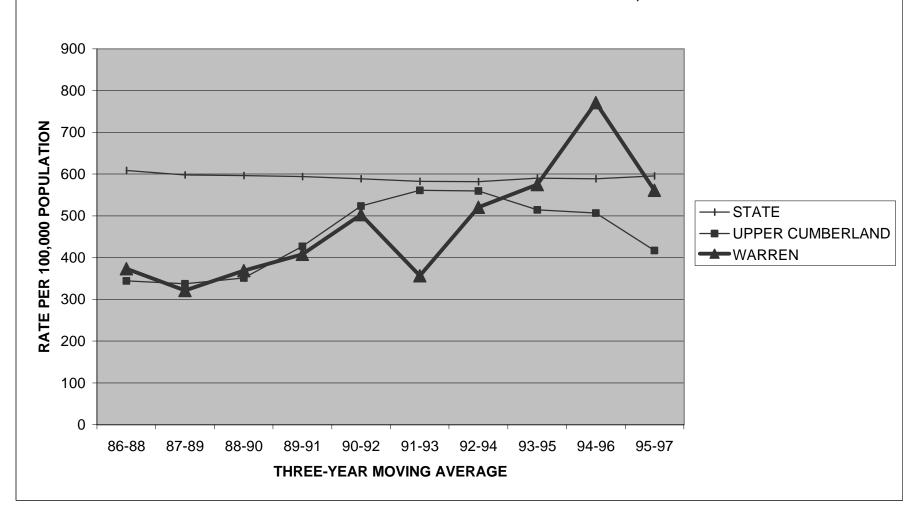


# Appendix 4

Mortality Data

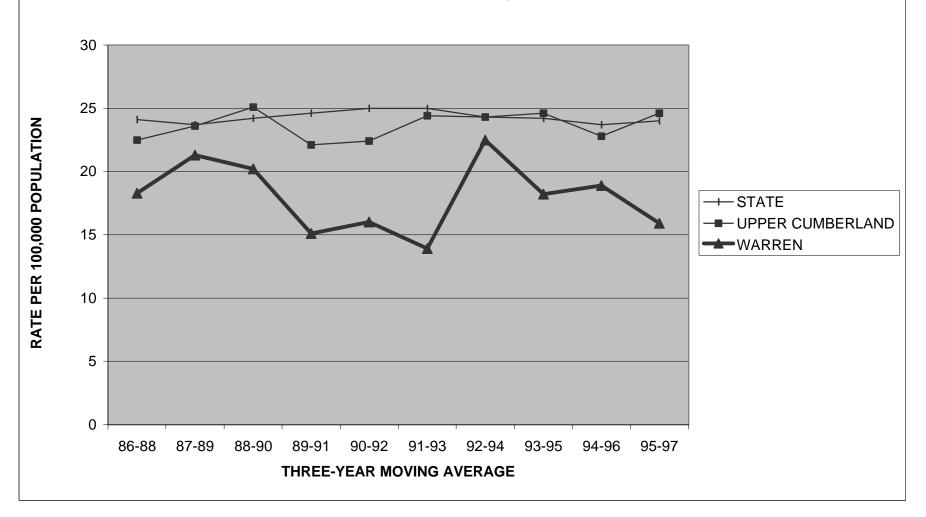
|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 608.9 | 598.3 | 596.8 | 594.4 | 588.8 | 582.7 | 582.2 | 590.6 | 588.7 | 595.7 |  |
| UPPER CUMBERLAND | 344.0 | 337.6 | 351.2 | 427.2 | 523.4 | 560.8 | 559.5 | 514.1 | 506.7 | 416.7 |  |
| WARREN           | 373.5 | 321.2 | 368.4 | 407.6 | 503.2 | 356.7 | 520.4 | 574.6 | 771.2 | 561.3 |  |

#### OTHER RACES FEMALE AGE-ADJUSTED MORTALITY RATE PER 100,000 POPULATION



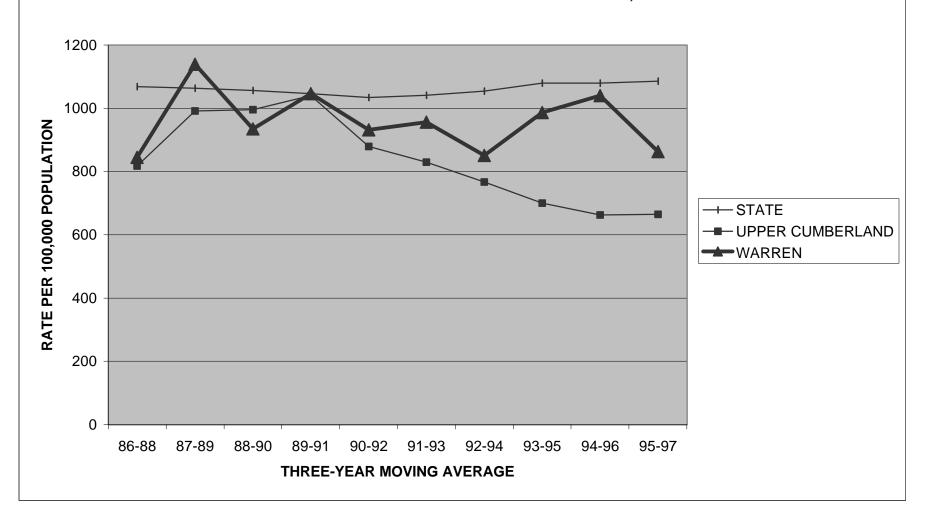
|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 24.1  | 23.7  | 24.2  | 24.6  | 25.0  | 25.0  | 24.3  | 24.2  | 23.7  | 24.0  |  |
| UPPER CUMBERLAND | 22.5  | 23.6  | 25.1  | 22.1  | 22.4  | 24.4  | 24.3  | 24.6  | 22.8  | 24.6  |  |
| WARREN           | 18.3  | 21.3  | 20.2  | 15.1  | 16.0  | 13.9  | 22.5  | 18.2  | 18.9  | 15.9  |  |

#### **VIOLENT DEATH RATE PER 100,000 POPULATION**



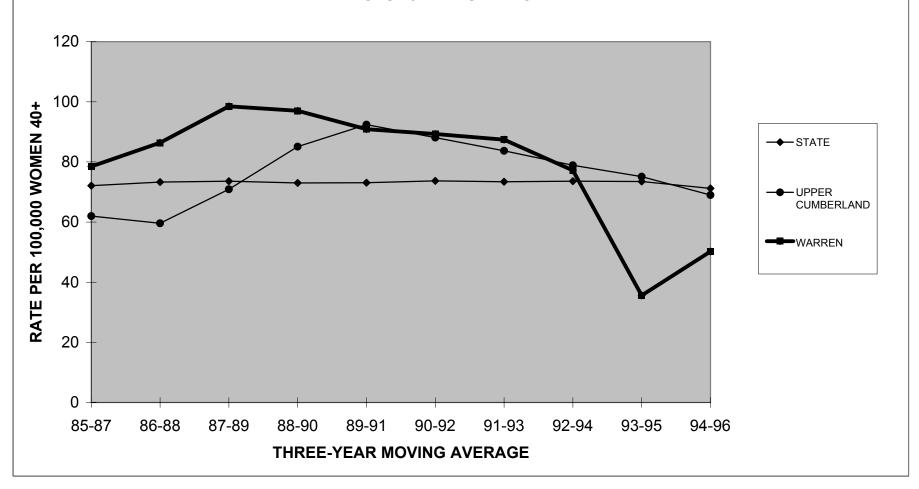
|                  | 86-88   | 87-89   | 88-90   | 89-91   | 90-92   | 91-93   | 92-94   | 93-95   | 94-96   | 95-97   |  |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| STATE            | 1,068.8 | 1,063.0 | 1,056.2 | 1,046.5 | 1,034.4 | 1,040.8 | 1,054.3 | 1,079.7 | 1,080.0 | 1,085.8 |  |
| UPPER CUMBERLAND | 817.8   | 992.0   | 995.6   | 1,039.8 | 878.9   | 829.4   | 766.8   | 699.8   | 663.0   | 665.1   |  |
| WARREN           | 845.0   | 1,138.8 | 934.6   | 1,046.7 | 932.1   | 956.0   | 850.7   | 986.4   | 1,040.2 | 862.9   |  |

#### OTHER RACES MALE AGE-ADJUSTED MORTALITY RATE PER 100,000 POPULATION



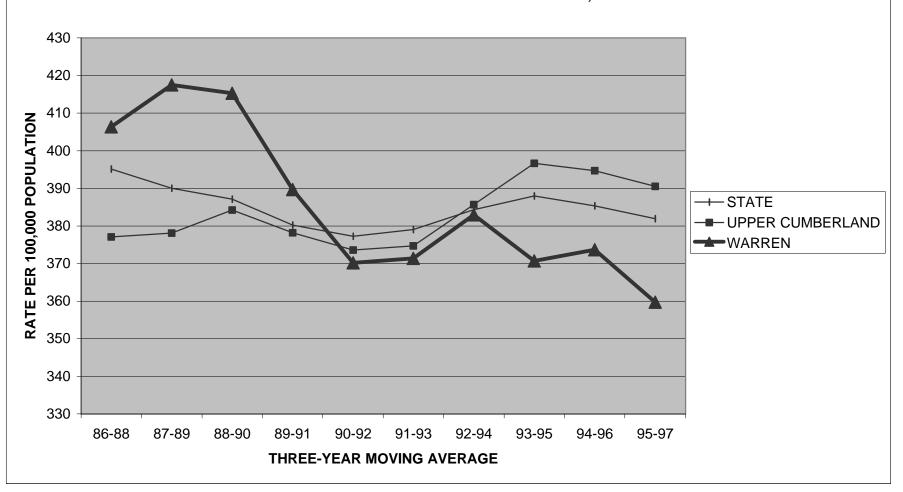
|                  | 85-87 | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 72.1  | 73.3  | 73.6  | 73    | 73.1  | 73.7  | 73.4  | 73.6  | 73.5  | 71.2  |  |
| UPPER CUMBERLAND | 62    | 59.6  | 70.9  | 85.1  | 92.4  | 88.1  | 83.7  | 78.9  | 75.1  | 69    |  |
| WARREN           | 78.5  | 86.4  | 98.5  | 97    | 90.9  | 89.3  | 87.4  | 77.2  | 35.6  | 50.2  |  |

# FEMALE BREAST CANCER MORTALITY RATE PER 100,000 WOMEN AGES 40 YEARS AND OLDER



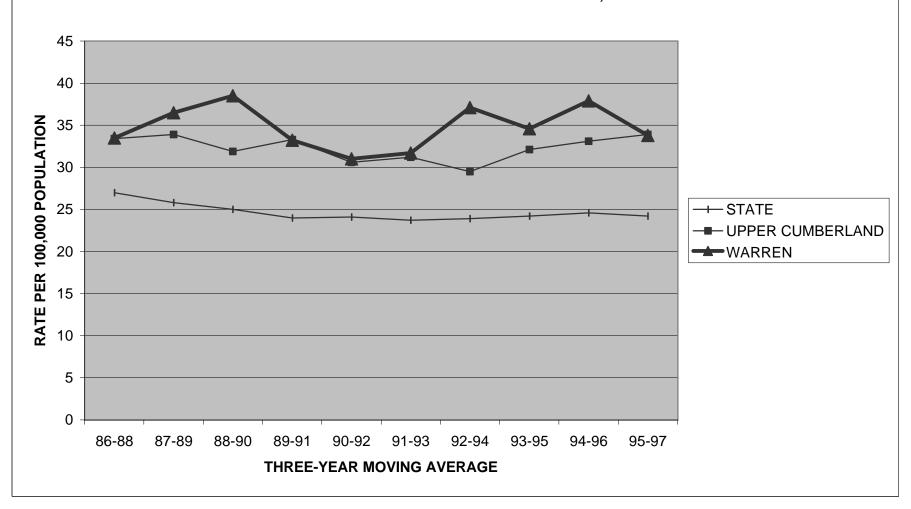
|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 395.1 | 390.0 | 387.1 | 380.2 | 377.2 | 379.0 | 384.3 | 388.0 | 385.3 | 381.9 |  |
| UPPER CUMBERLAND | 377.1 | 378.1 | 384.2 | 378.2 | 373.6 | 374.7 | 385.7 | 396.6 | 394.7 | 390.5 |  |
| WARREN           | 406.3 | 417.5 | 415.3 | 389.7 | 370.2 | 371.4 | 382.9 | 370.7 | 373.7 | 359.7 |  |

#### WHITE FEMALE AGE-ADJUSTED MORTALITY RATE PER 100,000 POPULATION



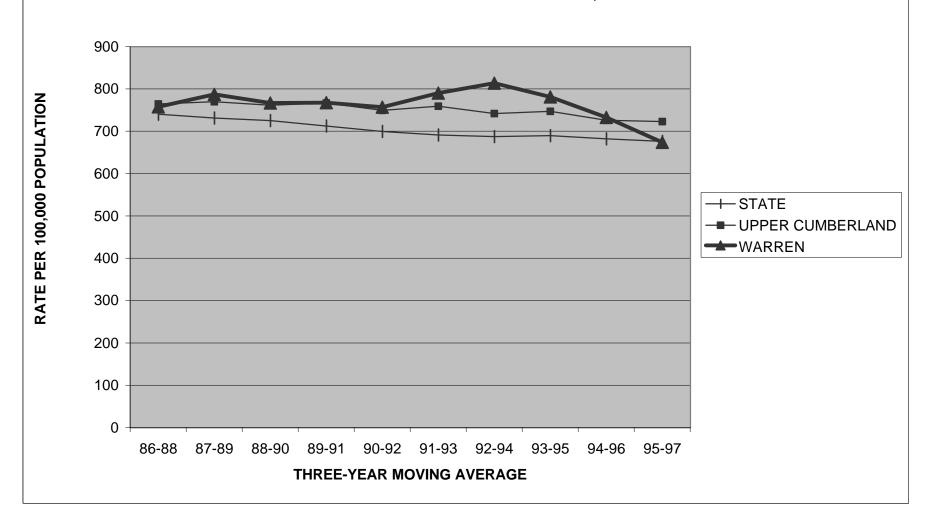
|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 27.0  | 25.8  | 25.0  | 24.0  | 24.1  | 23.7  | 23.9  | 24.2  | 24.6  | 24.2  |  |
| UPPER CUMBERLAND | 33.4  | 33.9  | 31.9  | 33.3  | 30.6  | 31.2  | 29.5  | 32.1  | 33.1  | 33.9  |  |
| WARREN           | 33.5  | 36.5  | 38.5  | 33.2  | 31.0  | 31.7  | 37.1  | 34.6  | 37.9  | 33.8  |  |

#### MOTOR VEHICLE ACCIDENTAL MORTALITY RATE PER 100,000 POPULATION



|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 740.2 | 731.5 | 725.3 | 712.3 | 699.9 | 691.0 | 687.8 | 690.1 | 682.1 | 675.8 |  |
| UPPER CUMBERLAND | 764.7 | 769.7 | 761.9 | 766.6 | 749.6 | 759.0 | 742.0 | 747.1 | 726.0 | 723.2 |  |
| WARREN           | 757.5 | 787.1 | 767.0 | 767.6 | 757.2 | 790.1 | 814.1 | 781.2 | 733.1 | 674.1 |  |

#### WHITE MALE AGE-ADJUSTED MORTALITY RATE PER 100,000 POPULATION

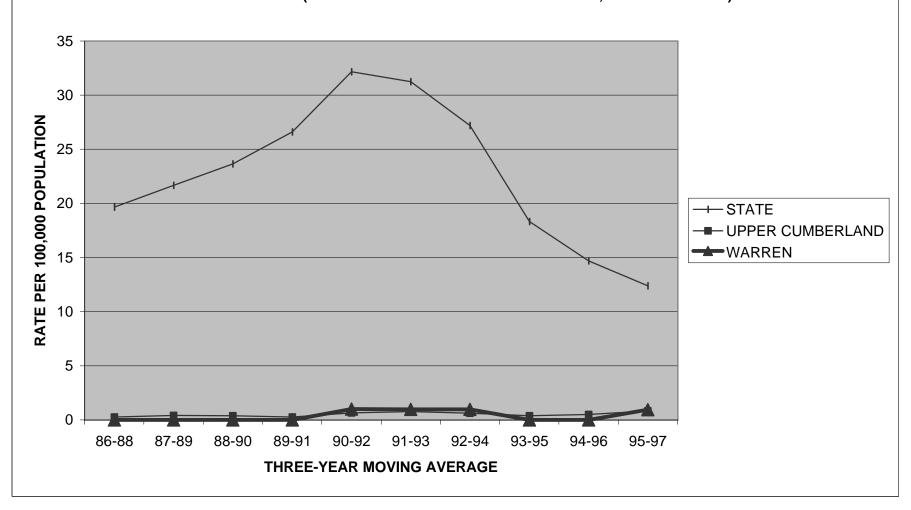


# Appendix 5

Morbidity Data

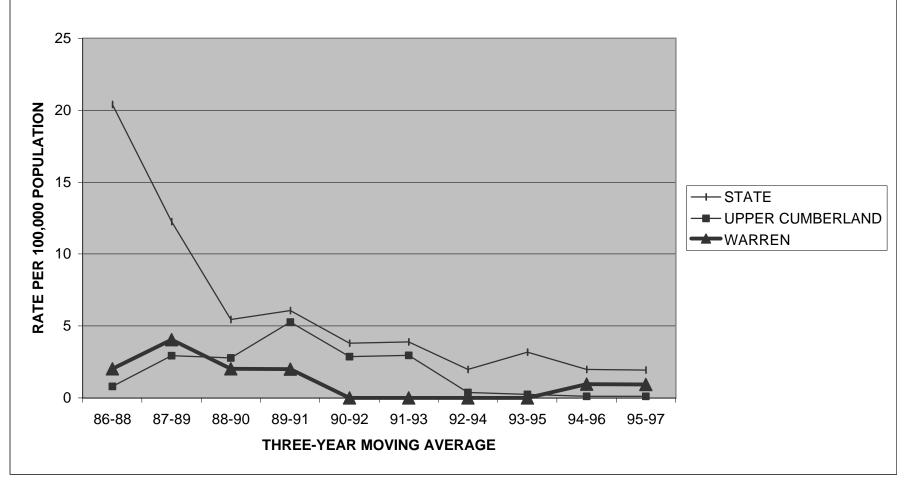
|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 19.6  | 21.7  | 23.7  | 26.6  | 32.2  | 31.2  | 27.2  | 18.3  | 14.7  | 12.4  |  |
| UPPER CUMBERLAND | 0.3   | 0.4   | 0.4   | 0.3   | 0.7   | 0.8   | 0.6   | 0.4   | 0.5   | 0.8   |  |
| WARREN           | 0.0   | 0.0   | 0.0   | 0.0   | 1.0   | 1.0   | 1.0   | 0.0   | 0.0   | 0.9   |  |

# SYPHILIS RATES (NUMBER OF REPORTED CASES PER 100,000 POPULATION)



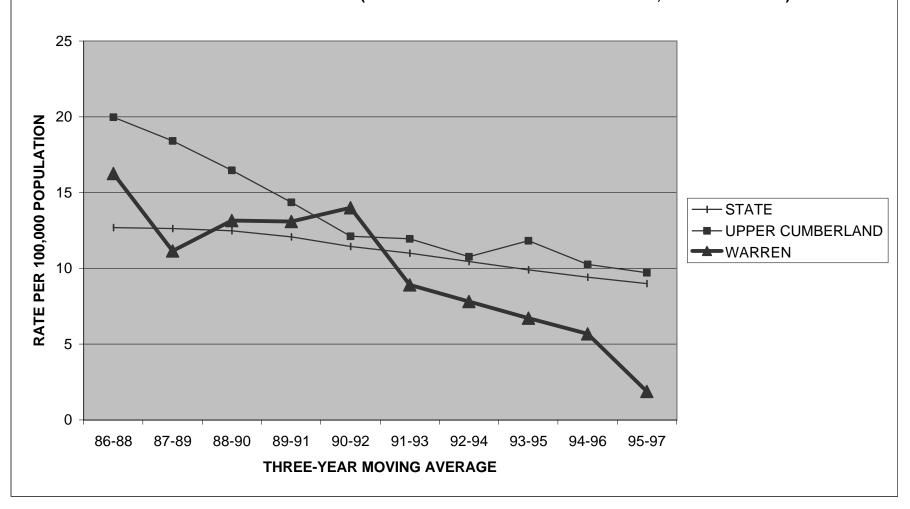
|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 20.4  | 12.3  | 5.5   | 6.1   | 3.8   | 3.9   | 2.0   | 3.2   | 2.0   | 1.9   |  |
| UPPER CUMBERLAND | 0.8   | 2.9   | 2.8   | 5.3   | 2.9   | 3.0   | 0.4   | 0.2   | 0.1   | 0.1   |  |
| WARREN           | 2.0   | 4.1   | 2.0   | 2.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.9   | 0.9   |  |

# VACCINE-PREVENTABLE DISEASE RATES (NUMBER OF REPORTED CASES PER 100,000 POPULATION)



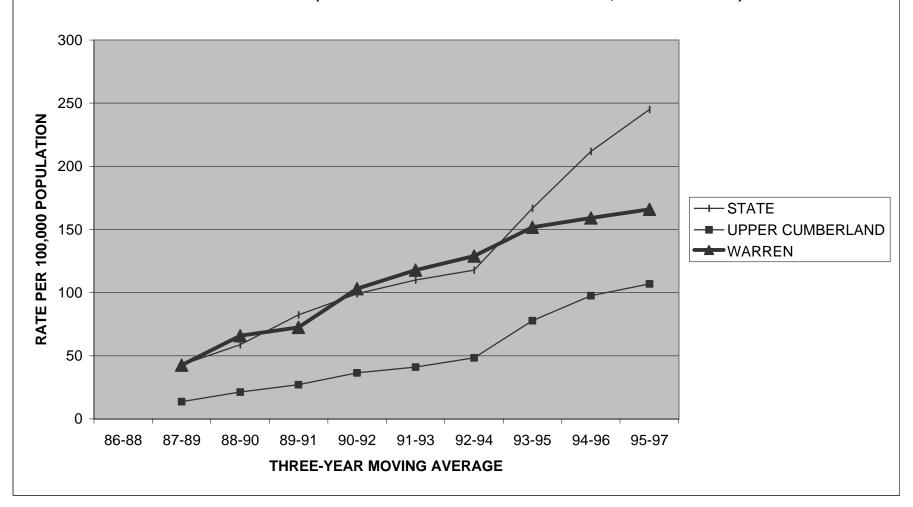
|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 12.7  | 12.6  | 12.5  | 12.1  | 11.4  | 11.0  | 10.5  | 9.9   | 9.4   | 9.0   |  |
| UPPER CUMBERLAND | 20.0  | 18.4  | 16.5  | 14.4  | 12.1  | 12.0  | 10.8  | 11.8  | 10.3  | 9.7   |  |
| WARREN           | 16.3  | 11.2  | 13.2  |       | 14.0  | 8.9   | 7.8   | 6.7   | 5.7   | 1.9   |  |

### TUBERCULOSIS DISEASE RATES (NUMBER OF REPORTED CASES PER 100,000 POPULATION)



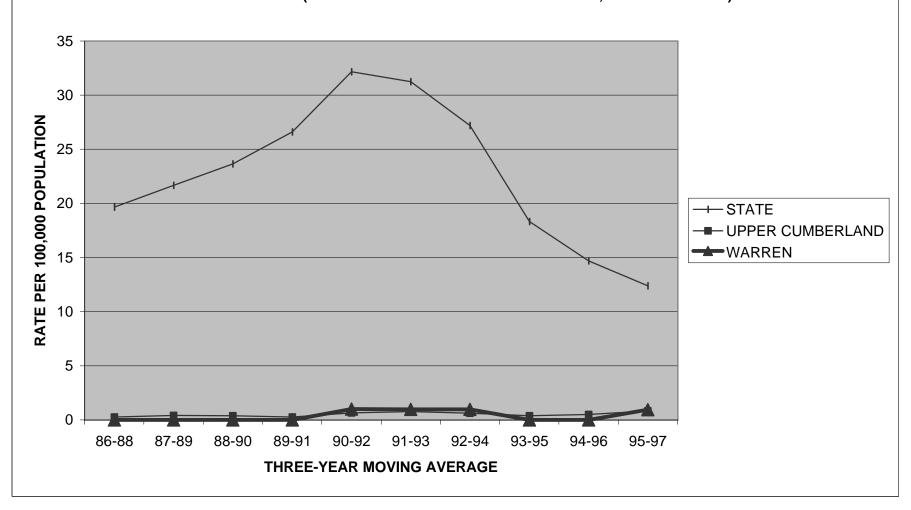
|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            |       | 42.8  | 58.8  | 82.3  | 99.1  | 109.9 | 117.7 | 166.7 | 211.8 | 245.0 |  |
| UPPER CUMBERLAND |       | 13.6  | 21.4  | 27.0  | 36.4  | 41.1  | 48.5  | 77.9  | 97.7  | 106.8 |  |
| WARREN           |       | 42.6  | 65.8  | 72.5  | 103.1 | 117.8 | 129.0 | 151.8 | 159.1 | 166.0 |  |

### CHLAMYDIA RATES (NUMBER OF REPORTED CASES PER 100,000 POPULATION)



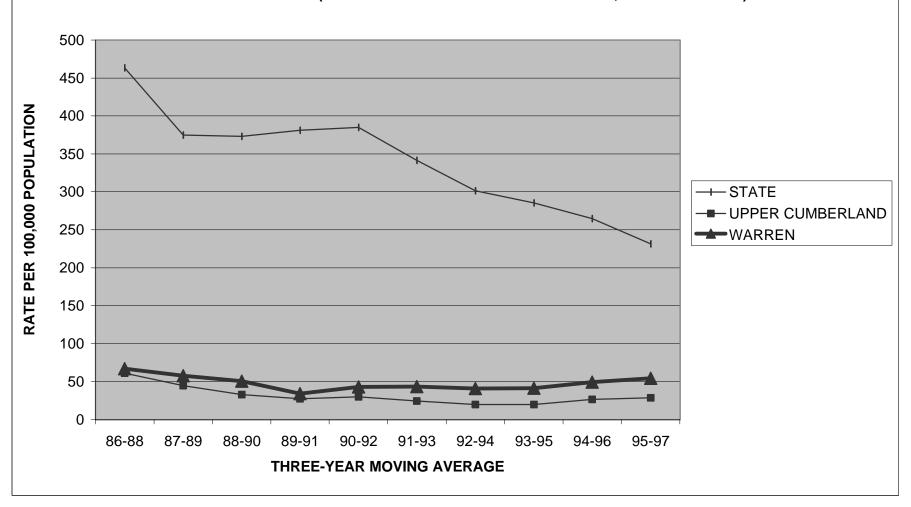
|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 19.6  | 21.7  | 23.7  | 26.6  | 32.2  | 31.2  | 27.2  | 18.3  | 14.7  | 12.4  |  |
| UPPER CUMBERLAND | 0.3   | 0.4   | 0.4   | 0.3   | 0.7   | 0.8   | 0.6   | 0.4   | 0.5   | 0.8   |  |
| WARREN           | 0.0   | 0.0   | 0.0   | 0.0   | 1.0   | 1.0   | 1.0   | 0.0   | 0.0   | 0.9   |  |

# SYPHILIS RATES (NUMBER OF REPORTED CASES PER 100,000 POPULATION)



|                  | 86-88 | 87-89 | 88-90 | 89-91 | 90-92 | 91-93 | 92-94 | 93-95 | 94-96 | 95-97 |  |
|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| STATE            | 463.3 | 374.6 | 373.3 | 380.9 | 385.0 | 341.5 | 301.5 | 285.3 | 264.7 | 231.4 |  |
| UPPER CUMBERLAND | 61.1  | 44.8  | 33.1  | 27.5  | 30.0  | 24.6  | 19.6  | 19.7  | 26.5  | 28.8  |  |
| WARREN           | 67.0  | 57.8  | 50.6  | 34.2  | 43.0  | 43.5  | 41.0  | 41.3  | 49.2  | 54.4  |  |

### **GONORRHEA RATES (NUMBER OF REPORTED CASES PER 100,000 POPULATION)**



# Appendix 6

Verbiage and Internet Address of HIT

Health Information Tennessee Web page created as a partnership between the TN Department of Health an the UTK Community Health Research Group can be located at: hitspot.utk.edu